

**REMARKS**

This Amendment is submitted in response to the Office Action dated June 1, 2006 and the Notice of Non-Compliant Amendment dated September 14, 2006. In the Office Action, the Patent Office objected to the drawings for informalities. Further, the Patent Office objected to the drawings under 37 CFR §1.84(p)(5) because the drawings do not include reference characters mentioned in the description. Still further, the Patent Office objected to the specification for informalities. Moreover, the Patent Office objected to Claim 13 under 37 CFR 1.75(c) as being of improper dependent form for failing to further limit the subject matter of a previous claim.

The Patent Office rejected Claims 1-29 under 35 U.S.C. §112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which Applicants regard as the invention. The Patent Office rejected Claims 1-5, 7, 9-16, 18, 20-22, 24 and 25 under 35 U.S.C. §102(a) or 35 U.S.C. §102(e) as being anticipated by U.S. Patent No. 6,610,173 to *Lindsay et al.* Further, the Patent Office rejected Claims 4-11, 17, 19 and 25-28 under 35 U.S.C. §103(a) as being unpatentable over *Lindsay et al.* in view of U.S. Patent No. 6,150,004 to *Oikawa et al.*; rejected Claim 29 under 35 U.S.C. §103(a) as being unpatentable over *Lindsay et al.* in view of U.S. Patent No. 6,160,200 to *Ehrnsperger et al.*; and rejected Claim 23 under 35

U.S.C. §103(a) as being unpatentable over *Lindsay et al.* in view of U.S. Patent No. 6,276,300 to *Lewis, II et al.*

By the present Amendment, Applicants amended FIGS. 5 and 6, the specification and Claims 1-22, 24, 26 and 29. Applicants assert that the amendments to the drawings, the specification and the claims and the remarks that follow overcome the objections and rejections made by the Patent Office and place the application in condition for allowance. Notice to that effect is requested.

With respect to the objection to the drawings for informalities, Applicants respectfully submit that the rejection has been overcome by the amendments to FIGS. 5 and 6 and for the reasons that follow.

In the Office Action, the Patent Office asserts:

The drawing are objected to because FIG. 6 has two separate layers referenced as 22a. It is believed that the reference number 22a at the left side of the figure should be 22b.

In response to the objection, Applicants amended FIG. 6 replacing the reference number 22a at the left side of the figure with the reference number 22b as suggested by the Patent Office. The second water resistant layer 22b is disclosed in the specification as filed. Applicants submit that the amendment to FIG. 6 overcomes the objection by the Patent Office. Notice to that effect is requested.

Further, the Patent Office objected to the drawings under 37 CFR §1.84(p)(5) for failing to include reference signs which are mentioned in the description.

More specifically, the Patent Office asserts:

In FIG. 5, adhesive layer 52 has no reference number.

FIGS. 5-10 do not show reference number 18 for indicia applied to one or more layers.

In response to the objection, Applicants amended FIG. 5 by adding reference number 52 to identify the adhesive layer 52. The adhesive layer 52 is disclosed in the specification as filed. Further, Applicants amended the specification to remove the reference number 18 from the specification. Applicants submits that the amendment to the specification overcomes the objection by the Patent Office. Notice to that effect is requested.

Still further, the Patent Office objected to the specification for informalities. More specifically, the Patent Office asserts:

On p. 5, the last sentence continuing on to p. 6 is meaningless.

On p. 7, the last sentence is incomplete.

On p. 7, the second and sixth paragraph are identical.

On p. 16, the reference number "16." In the second line should be omitted.

In response to the objection, Applicants amended the specification to overcome the objection to the specification. Applicants submits that the amendment to the specification overcomes the objection by the Patent Office. Notice to that effect is requested.

The Patent Office objected to Claim 13 under 37 CFR §1.75(c) as being improper dependent form for failing to further limit the subject matter of a previous claim. More specifically, the Patent Office asserts:

Claim 13 recites that "the indentation is continuous along the sheet." The claim depends from Claim 12, which recites "the indentation is uniform across the sheet." If the indentation is uniform across the sheet, then it must be continuous from one side of the sheet to the other. If it were discontinuous, then it could be uniform "across" the sheet. Also note that both claims refer to a single indentation and that, if the indentation were not continuous there would be multiple indentations.

In response to the objection, Applicants amended Claim 13 to overcome the objection by the Patent Office. Applicants submits that the amendment to Claim 13 overcomes the objection by the Patent Office. Notice to that effect is requested.

With respect to the rejection of Claims 1-29 under 35 U.S.C. §112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which Applicant regards as the invention, Applicant submits that the amendments to Claims 1-22, 24, 26 and 29 overcome the rejection by the Patent Office. In the Office Action, the Patent Office asserts:

Claim 2 recites "the plurality of depressions are uniform across the base," The intended meaning of the word "uniform" is not clear.

Claim 3 recites "the plurality of depressions are continuous from side to side of the base. The intended meaning of the word "continuous" is unclear.

Claims 1, 4-11, 15-19, 22 and 29 recite "associated with" in reference to two layers or, in Claim 29, a

liquid and the indented texture of the sheet. Claims 12, 14-17 and 19-21 recite "applying" a layer to the sheet. Claims 16, 18, 19 and 22 recite "adhering" one layer to another. It is not clear how the terms "associated with", "applying", and "adhering" are intended to relate to one another and how the product is intended to be assembled. By adhering or applying one layer to another, the layers inherently become associated with one another. When a layer is claimed as being associated with another layer, does that mean one has been applied to the other, and are the layers adhered, or stuck, together?

Claim 19 recites the limitation "adhering a plurality of paper layers to the plurality of paper layers." There is insufficient antecedent basis for this limitation in the claim.

Claim 26 recites "positioning the sheet on a surface wherein the bottom surface of the sheet is adjacent to the surface." It is not clear what the word "surface" refers to. For instance, is it a table or cutting board surface, the surface of a cutting utensil, the bottom surface of a container, the surface of the object to be protected, the surface of another sheet of the paper, the surface of a user's skin or some other surface?

Applicant submits that the objection to Claims 1-29 under 35 U.S.C. §112, second paragraph, has been overcome. Notice to that effect is requested.

In the Office Action, the Patent Office rejected Claims 1-5, 7, 9-16, 18, 20-22, 24 and 25 under 35 U.S.C. §102(a) or §102(e) as being anticipated by *Lindsay et al.* More specifically, the Patent Office alleges that:

*Lindsay et al.* discloses a three-dimensional paper web having a pattern of protrusions (plurality of indentations or depressions) that extend outside the plane of the paper (Abs; ref #68 in Figs 2A, 2B, 3A, 3B; col. 11, lines 44-48; col. 12, lines 43-45). The web can be made into sheets and stacked in planar form (thus the base forms a plane), thus can have a defined length and width (col. 31, lines 47-50). The web can have opposing outer surfaces (i.e. a top side and a bottom side) (col. 31, lines 16-38). The product can have multiple layers

(i.e. a plurality of paper layers), and a pair of plies, such as, the opposing outer surfaces can comprise hydrophobic matter (water resistant layer) and/or antimicrobial additives (col. 31, lines 19-25 and 30), thus a paper layer can be sandwiched between the outer layers or between the top layer and the base paper. The pair of plies comprising hydrophobic matter and/or antimicrobial additives need not be the outer surfaces, thus the hydrophobic layer can be sandwiched between the base layer and the antimicrobial layer or can be adjacent to the antimicrobial layer (one possible meaning of "associated with"). Alternatively, the hydrophobic layer can be applied to the antimicrobial layer and can be the top layer. The upper layer can have both hydrophobic matter and antimicrobial additives (alternate possible meaning of "associated with"). The plurality of depressions can be uniform in size and shape (Fig. 3A, col. 12, lines 43-61).

Independent Claim 1, as amended, requires a paper having base which forms a plane and an antimicrobial surface connected to the top side of the base wherein the antimicrobial surface covers the top side wherein the antimicrobial surface is made of silver zeolite.

Independent Claim 12, as amended, requires a process for making a paper having the step of connecting an antimicrobial layer to the first side of the sheet wherein the antimicrobial layer is made of polyethylene having silver zeolite.

*Lindsay et al.* merely disclose a three-dimensional tissue and a method for imprinting a paper web during a wet pressing event which results in asymmetrical protrusions corresponding to the deflection conduits of a deflection member. A differential velocity transfer during a pressing event improves the molding and imprinting of a web with a deflection member. Tissue webs produced

via the method have sets of physical and geometrical properties, such as, for example, a pattern of or a repeating pattern of protrusions having asymmetrical structures.

Nowhere do *Lindsay et al.* disclose a paper having base which forms a plane and an antimicrobial surface connected to the top side of the base wherein the antimicrobial surface covers the top side wherein the antimicrobial surface is made of silver zeolite as required by Claim 1. Nowhere do *Lindsay et al.* disclose a process for making a paper having the step of providing the sheet which is substantially flat and forms a plane as required by Claim 12. Further, nowhere do *Lindsay et al.* disclose a process having the step of connecting an antimicrobial layer to the first side of the sheet wherein the antimicrobial layer is made of polyethylene having silver zeolite as required by Claim 12.

Under 35 U.S.C. §102, anticipation requires that a single reference discloses each and every element of Applicants' claimed invention. *Akzo N.V. v. U.S. International Trade Commission*, 808 F.2d 1471, 1479, 1 USPQ 2d. 1241, 1245 (Fed. Cir. 1986). Moreover, anticipation is not shown even if the differences between the claims and the reference are "insubstantial", and one skilled in the art could supply the missing elements. *Structure Rubber Products Co. v. Park Rubber Co.*, 749 F.2d. 707, 716, 223 USPQ 1264, 1270 (Fed. Cir. 1984).

Since *Lindsay et al.* fail to disclose the elements specifically defined in amended independent Claims 1 and 12, Applicants assert that the rejection of Claims 1-5, 7, 9-16, 18, 20-22, 24 and 25 under 35 U.S.C. §102(a) or §102(e) has been overcome and should be withdrawn. Notice to that effect is requested.

In the Office Action, the Patent Office rejected Claims 4-11, 17, 19 and 25-28 under 35 U.S.C. §103(a) as being unpatentable over *Lindsay et al.* in view of *Oikawa et al.* More specifically, the Patent Office alleges that:

*Lindsay et al.* does not disclose that there can be multiple water-resistant layers. *Oikawa et al.* discloses an antimicrobial laminate and a bag using the laminate. The laminate comprises a paper layer 33, a steam impermeable layer 34, and multiple alternating antimicrobial-containing 16a, 16b and steam-pervious layers 17a, 17b (Figs. 14 and 15; col. 20, line 65 to col. 21, line 26). The steam-pervious layers have minute pores that can be sized to restrict the amount of water that can pass (thus the layers function as moisture resistant layers) (col. 10, lines 5-21). The benefit is to control the release of the antimicrobial agent, which is released by the action of water, to extend the preservation of food enclosed in the laminate. *Oikawa et al.* also discloses a bag made from the antimicrobial laminate for preserving food (food is enclosed within the laminate and is surrounded by the antimicrobial surface) (col. 22, lines 30 and 31). Placing the food into the bag is equivalent to wrapping the antimicrobial surface around the food. In another embodiment, the laminate is cut into smaller sheets, which are applied to the inner wall surfaces of a container used to store food (col. 22, lines 32-38). In this embodiment, the sheet would be applied to a surface (container), thus the bottom of the sheet is adjacent to the surface of the container.

Independent Claim 26, as amended, requires a method having the step of providing a sheet which is made of a paper having a weight range between sixteen and a half pounds and ninety pounds wherein the sheet forms a plane and further wherein the antimicrobial surface is made of polyethylene having silver zeolite.

*Oikawa et al.* merely teach an antimicrobial laminate for effecting gradual release of an antimicrobial agent. A substratal film impervious to steam is provided on one side of a substratal film proper of paper with a gas-barrier layer of aluminum foil. An antimicrobial film pervious to steam is formed by sequentially superposing an adhesive agent layer containing an AITC inclusion cyclodextrin compound, a steam-pervious film and a sealant material of steam-pervious film. The steam-pervious film has a fine powder of silica gel dispersed therein and an adhesive agent layer. An antimicrobial layer is constructed by adhesively superposing the substratal film and the antimicrobial film through the medium of the adhesive agent layer. A bag is constructed by folding the laminate with the sealant material on the inner side and attaching a fastener of ridge-groove engagement to the mouth of the bag.

Nowhere do *Lindsay et al.* nor *Oikawa et al.*, taken singly or in combination, teaches or suggests the step of providing a sheet which is made of a paper having a weight range between sixteen and a half pounds and ninety pounds wherein the sheet forms a plane and

further wherein the antimicrobial surface is made of polyethylene having silver zeolite as required by Claim 26.

Moreover, a person of ordinary skill in the art would never have been motivated to combine the teachings of *Lindsay et al.* with *Oikawa et al.* in the manner suggested by the Patent Office in formulating the rejection under 35 U.S.C. §103(a). It is submitted that the question under §103 is whether the totality of the art would collectively suggest the claimed invention to one of ordinary skill in this art. *In re Simon*, 461 F.2d 1387, 174 USPQ 114 (CCPA 1972).

That elements, even distinguishing elements, are disclosed in the art is alone insufficient. It is common to find elements somewhere in the art. Moreover, most if not all elements perform their ordained and expected functions. The test is whether the invention as a whole, in light of the teachings of the references in their entireties, would have been obvious to one of ordinary skill in the art at the time the invention was made. *Connell v. Sears, Roebuck & Co.*, 722 F.2d 1542, 220 USPQ 193 (Fed. Cir. 1983).

It is insufficient that the art disclosed components of Applicants' invention, either separately or used in other combinations. A teaching, suggestion, or incentive must exist to make the combination made by Applicants. *Interconnect Planning Corp. v. Feil*, 774 F.2d 1132, 1143, 227 USPQ 543, 551 (Fed. Cir. 1988).

With the analysis of the deficiencies of *Lindsay et al.* and *Oikawa et al.* in mind, as enumerated above, no reason or suggestion in the evidence of record exists why one of ordinary skill in the art would have been led to combine *Lindsay et al.* and *Oikawa et al.* to produce the claimed invention. Therefore, *prima facie* obviousness has not been established by the Patent Office as required under 35 U.S.C. §103.

Even assuming that one having ordinary skill in the art could somehow have combined the references applied by the Patent Office, the references still lack the novel features and the novel steps positively recited in independent Claim 26. Accordingly, Applicants assert that the rejection of Claims 4-11, 17, 19 and 25-28 under 35 U.S.C. §103(a) has been overcome and should be withdrawn. Notice to that effect is requested.

With respect to the rejection of Claim 29 under 35 U.S.C. §103(a) as being unpatentable over *Lindsay et al.* in view of *Ehrnsperger et al.*, Applicants respectfully submit that the rejection has been overcome by the amendment to independent Claim 26 and for the reasons that follow.

In the Office Action, the Patent Office alleges:

*Lindsay et al.* does not disclose separating a liquid from the object wherein the liquid is associated with the indented texture of the sheet. *Lindsay et al.* does disclose that the web can be converted to an absorbent article (col. 33, lines 20-25).

*Ehrnsperger et al.* discloses a waste passage member comprising an absorbent core for absorbing and

retaining fluids (Abs; col. 7, lines 22-26) and a barrier layer to prevent wastes from moving back to the wearers skin (col. 13, lines 60-66). The barrier layer can have a skin care composition (col. 14, lines 16-19) which can comprise an antimicrobial (col. 17, lines 5-8).

Claim 29 requires the step separating a liquid from the object on the antimicrobial surface wherein the liquid is located on the top surface of the sheet. *Ehrnsperger et al.* fail to teach or to suggest the elements of the present invention which are not taught by *Lindsay et al.* as required by amended independent Claim 26 from which Claim 29 depends. Accordingly, the rejection of Claim 29 under 35 U.S.C. §103(a) has been overcome and should be withdrawn. Notice to that effect is requested.

With respect to the rejection of Claim 23 under 35 U.S.C. §103(a) as being unpatentable over *Lindsay et al.* in view of *Lewis, II et al.*, Applicants respectfully submit that the rejection has been overcome by the amendment to independent Claim 12, respectively, and for the reasons that follow.

In the Office Action, the Patent Office alleges:

*Lindsay et al.* does not disclose shredding the sheet.

*Lewis, II et al.* discloses animal litter comprising shredded paper containing an antimicrobial (col. 2, lines 9-16).

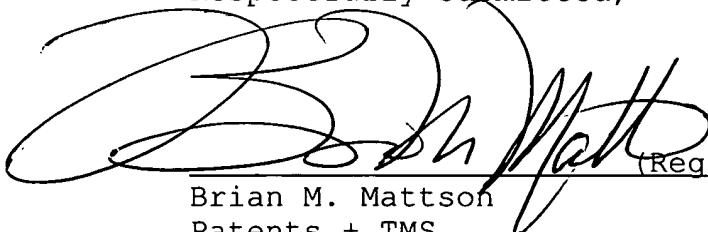
Claim 23 requires the step of shredding the sheet. *Lewis, II et al.* fail to teach or to suggest the elements of the present invention which are not taught by *Lindsay et al.* as required by amended independent Claim 12 from which Claim 23 depends.

Accordingly, the rejection of Claim 23 under 35 U.S.C. §103(a) has been overcome and should be withdrawn. Notice to that effect is requested.

Claims 2-11 depend from Claim 1; Claims 13-25 depend from Claim 12; and Claims 27-29 depend from Claim 26. These claims are further believed allowable over the references of record for the same reasons set forth with respect to their parent Claims 1, 12 and 26 since each sets forth additional structural elements of Applicants' present invention.

In view of the foregoing remarks and arguments, Applicants respectfully submit that all of the claims in the application are in allowable form and that the application is in condition for allowance. If, however, any outstanding issues remain, Applicants urge the Patent Office to telephone Applicants' attorney so that the same may be resolved and the application expedited to issue. Applicants' request the Patent Office to indicate all claims as allowable and to pass the application to issue.

Respectfully submitted,



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**IN THE DRAWINGS:**

FIG. 5 has been corrected as shown in the Replacement Drawing Sheet in the attached Appendix.

FIG. 6 has been corrected as shown in the Replacement Drawing Sheet in the attached Appendix.